

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/GB2004/050037

International filing date (day/month/year)
09.12.2004

Priority date (day/month/year)
10.12.2003

International Patent Classification (IPC) or both national classification and IPC
B21L3/00, B21L11/00, C22C5/08, A44C11/00, A44C27/00

Applicant
MIDDLESEX SILVER CO. LIMITED

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**International application No.
PCT/GB2004/050037

AP3 Rec'd PCT/PTO 08 JUN 2006

Box No. 1 Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/GB2004/050037

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-28
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-28
Industrial applicability (IA)	Yes: Claims	1-28
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Reference is made to the following documents:

D1: US-A-2 138 088

D2: EP-A-0 729 398

2. Independent claims 1 and 28:

The subject-matter of claims 1 and 28 is unclear due to the term "about" in front of the limit values for the given range in these claims. Since the range is already very broad, the use of such a vague term renders the scope of the claims unclear (Article 6 PCT). The analysis is based on the assumption, that claims 1 and 28 read "... and 0.5 - 3 wt % Ge".

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 does not involve an inventive step in the sense of Article 33(3) PCT.

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and discloses a method of making silver chain which comprises forming lengths of silver wire into successive chain links whose ends abut, and closing the links by brazing abutting ends thereof (page 1, column 1, line 57 to column 2, line 5).

The subject-matter of claim 1 therefore differs from this known method in that:

the links are closed by brazing or welding by means of a laser, wherein the wire comprises at least 92.5 wt % Ag and 0.5 - 3 wt % Ge.

The problem to be solved by the present invention may therefore be regarded as joining the abutting ends of the links without having to apply an additional filler material.

The solution proposed in claim 1 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) for the following reasons.

Document D2 discloses the joining of two elements made of a material comprising a silver content of at least 77% by weight and a germanium content of between 0.4% and 7% (claims 1 and 3). A preferred material has a silver content of at least 92.5 wt % and a germanium content of 0.5 - 3 wt % (claim 2). D2 further clearly states that laser welding of these materials is advantageous (column 4, lines 26-34) and that in a corresponding joining method no additional filler material is needed (column 2, line 57-column 3, line 7).

Having knowledge of the teaching of D2 and looking for a way of manufacturing a silver chain according to the method known from D1 without the need of adding filler material, it would be obvious to the person skilled in the art to manufacture the chain from the preferred alloy of D2 and joining the abutting ends by laser welding, thereby arriving directly at a method according to claim 1. D2 furthermore gives a clear indication in column 1, line 41 to the use of the alloy in the field of jewellery.

The same reasoning applies, *mutatis mutandis*, to the subject-matter of the corresponding independent claim 28, which therefore is also considered not inventive.

3. Dependent claims 2 to 27:

Dependent claims 2 to 27 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step. All additional features are either known from the documents cited in the search report or represent normal workshop practice.

Re Item VIII

See Item V, section 2.

The subject-matter of claims 15 and 16 is also unclear due to the term "about"